

REMARKS

In the Office Action mailed July 12, 2006, claims 1-13 were rejected. Claims 1, 2, 4-8 and 10-13 were rejected under 35 U.S.C. §102(b) as being anticipated by Konop (U.S. Pat. No. 6,478,317). Claims 3 and 9 were rejected under 35 U.S.C. §103(a) as being obvious over Konop in view of Hulstein et al. (U.S. Pat. No. 6,135,469). Claims 8-12 were objected to as being redundant. The drawings were objected to under 37 C.F.R. 1.84(p)(5) for including a reference character not mentioned in the specification. In addition, the specification was objected to as having an informality and an Abstract with more than 150 words.

Objection to the Drawings

The drawings were objected to under 37 C.F.R. 1.84(p)(5) for including a reference character not mentioned in the specification. With the present Amendment, the paragraph at page 4, ll. 6-13 has been amended to add the reference character "37" to the written description in conformance with the original drawings. With this Amendment, the drawings (and the specification) are in proper form and the objection should be withdrawn. Notification to that effect is requested.

Objections to the Specification

The specification was objected to as having an informality and an Abstract with too many words. The present amendment corrects the typographical errors in the paragraph at page 6, line 21 to page 7, line 5 in order to implement the examiner's suggested correction of the informality. In addition, the Abstract at page 12 has been amended to decrease the number of words to be between 50-150 in total. Thus, the present Amendment is now in proper form, and the objections to the specification should be withdrawn. Notification to that effect is requested.

Claim Objections

Claims 8-12 were objected to as being redundant. Claims 8-12 were inadvertently indicated to depend from claim 1, rather than claim 7 as intended. As suggested by the Examiner, claims

8-12 have hereby been amended to depend from independent claim 7. Thus, the claim objections are now moot and should be withdrawn.

Claim Rejections - 35 U.S.C. §102(b)

Claims 1, 2, 4-8 and 10-13 were rejected under 35 U.S.C. §102(b) as being anticipated by Konop (U.S. Pat. No. 6,478,317).

As defined by independent claim 1, a mounting bracket capable of attachment to a vehicle frame includes a U-shaped portion and a mounting plate. According to independent claim 1, the U-shaped portion must have a base disposed in a plane extending in X and Y dimensions and a pair of spaced legs connected to the base and extending in a first direction generally normal to the base in a Z dimension. Each leg of the pair of spaced legs must have a free end, and the pair of spaced legs and the base must define a space for receiving an arm of the booster axle assembly. Each leg defines first and second appendages spaced apart in the Y dimension, with the first and second appendages of each leg defining a slot that extends in the Z dimension from the free end of the leg toward the base. Independent claim 1 further requires that the mounting plate be connected to the base of the U-shaped portion and extend in a second direction normal to the base in the Z dimension.

Konop discloses a booster axle pivot mount system (called a swing-frame assembly for a tag axle by Konop). Konop discloses a pair of pivot assemblies 160 that each include a pivot bracket 162,¹ a bearing housing 164,² a pair of sealing washers 172, and a pivot pin 166 defining slotted openings 168 and a retaining hub 170. (Konop, col. 5, ll. 15-42; FIGS. 2, 3, and 5-6A). The bearing housings 164

¹Konop identified both a "pattern of holes" and a "pivot bracket" by reference number 162. (Konop, col. 5, ll. 18, 30 and 56). However, because the term "pattern of holes" is used only once with that reference number while "pivot bracket" is used repeatedly with that reference number, it is believed that the proper term for the element designated in the figures of Konop by reference number 162 is "pivot bracket".

²Konop identifies both a "structural pivot bracket" and a "bearing housing" by reference number 164. (E.g., Konop, col. 5, ll. 19, 31, 34 and 40). However, because the term "structural pivot bracket" is used only once with that reference number while "bearing housing" is used repeatedly with that reference number, it is believed that the proper term for the element designated in the figures of Konop by reference number 164 is "bearing housing". As noted in footnote 1, it is believed that reference number 162 properly corresponds to the term "pivot bracket".

of the pivot assemblies 160 of Konop are mounted to respective spaced apart chassis members 114 of a truck 100 with bolt assemblies 167 connected through holes 163. (Konop, col. 5, ll. 14-20 and 29-34; FIGS. 4-6A). Each arm 120 of a booster axle assembly (or swing-frame assembly) has a dual-prong or dual forked connector shape 180 supported by a web 182 forming a U-shaped portion,³ which is integrally formed with each arm 120. (Konop, col. 3, ll. 20-23; col. 5, ll. 43-44; FIGS. 4 and 6). The U-shaped portions 180 are further integrally connected to a torque tube 130, which extends between the two arms 120 of the booster axle assembly. (Konop, col. 5, ll. 48-49; FIGS 4-6). A clevis device 184 is inserted into the U-shaped portion 180 to connect to the pivot pin 166. (Konop col. 5, ll. 43-48; FIGS. 5 and 6).

However, Konop does not show, teach or disclose each and every element of independent claim 1, because Konop does not show, teach or disclose a mounting bracket that defines a space for receiving an arm of a booster axle assembly. Rather, Konop discloses a U-shaped portion 180 of connector assemblies 160 that are integrally formed with the arms 120 of the booster axle assembly. Contrary to the suggestion on page 4 of the Office Action, the U-shaped portion 180 of Konop cannot receive an arm of the booster axle assembly because that U-shaped portion 180 is integrally formed with the an arm 120 of the booster axle assembly. (Konop, col. 3, ll. 20-23; col. 5, ll. 43-44; FIGS. 3, 4, 6 and 6A). The mounting bracket as defined by independent claim 1 is an alternative design to that disclosed by Konop.

There is also no mounting plate connected to the U-shaped portion 180 in Konop. The Office Action states that a mounting plate is shown in Konop "near 120." However, it is unclear what portion of the structure shown in Konop is being referred to in the Office Action. Applicant believes Konop shows a mounting plate portion of the pivot bracket 162 where the holes 163 are formed. (Konop, FIG. 6A). But there does not appear to be a mounting plate used with the U-shaped portion 180, which is integrally formed with the arm 120 of the booster axle assembly. (Konop, FIG. 5). Thus, for all the

³FIG. 4 of Konop appears to erroneously identify one web 182 by reference number 122, and include a spurious reference number 182. (Contrast, Konop FIG. 6).

reasons stated above, Konop does not show, teach or disclose each and every limitation of independent claim 1, and the rejection under §102(b) should be withdrawn. Notification to that effect is requested.

Claims 2, 4-6 and 14 depend from independent claim 1, and include all of the limitations of that base claim. Furthermore, dependent claims 2, 4-6 and 14 contain further limitations not shown, taught or disclosed by Konop. For instance, new dependent claim 14 requires that a gusset connect the mounting plate and the base of the U-shaped portion and be positioned substantially in a plane extending in the X and Z dimensions. Konop does not disclose such a gusset. Thus, dependent claims 2, 4-6 and 14 are likewise allowable over the cited art for the reasons stated above.

Amended independent claim 7 relates to a pivot mount system for pivotally mounting a booster axle assembly having a pair of spaced arms to first and second frame members of a vehicle frame. Claim 7 has been presently amended to clarify the language of the claim, but not for reasons related to patentability. According to amended independent claim 7, the system must include a mounting bracket attached to each of the first and second frame members near a rear of the vehicle frame, a bearing housing connected to each of the spaced arms, and a pivot pin. Each mounting bracket according to independent claim 7 must include a U-shaped portion having a base, a mounting plate connected to the base of the U-shaped portion and secured to a respective frame member of the vehicle frame. The bearing housing must contain a pivot bearing that defines a central opening, and the pivot pin must be positioned within the central opening of the pivot bearing with opposing end portions of the pivot pin exposed on opposite sides of the bearing housing to be secured within slots of the mounting bracket. The U-shaped portion must be configured to receive an arm of the booster axle assembly.

The relevant disclosure of Konop is discussed above.

Konop does not show, teach or disclose each and every element of amended independent claim 7 because Konop does not show, teach or disclose a mounting plate connected to a base of a U-shaped portion and secured to a vehicle frame member as required by amended independent claim 7. As discussed above, Konop appears to show a mounting plate portion of the pivot bracket 162 where the

holes 163 are formed. (Konop, FIG. 6A). But there does not appear to be a mounting plate connected to the U-shaped portion 180 as stated in the Office Action. Rather, Konop discloses the U-shaped portion 180 as integrally formed with the arm 120 of the booster axle assembly. (Konop, col. 3, ll. 20-23; FIG. 5). Furthermore, the U-shaped portion 180 of Konop is not configured to receive an arm of the booster axle assembly because the U-shaped portion 180 is integrally formed with an arm 120 of the booster axle assembly. (Konop, col. 5, ll. 43-44; FIGS. 4 and 6). Thus, Konop fails to show, teach or disclose each and every limitation of amended independent claim 7 and the rejection under §102(b) should be withdrawn. Notification to that effect is requested.

Claims 8, 10-12 and 15 depend from amended independent claim 7, and include all of the limitations of that base claim. Furthermore, those dependent claims include additional limitations not shown, taught or disclosed by Konop. For instance, new dependent claim 15 requires that a bearing housing be welded integrally to the end of an arm of the booster axle assembly. However, the apparatus of Konop is neither welded to its supporting structure, nor is it supported by an arm 120 of the booster axle assembly. Rather, Konop discloses a an integral bearing housing 164 and pivot bracket 162 that is bolted to a vehicle frame 114. Konop also teaches away from such permanent connections of the bearing housing 164 and its supporting member (frame 114). (See Konop, col. 2, ll. 45-52; col. 3, ll. 2-20; FIG. 6A). Thus, for all the reasons stated above, dependent claims 8, 10-12 and 15 are likewise allowable over the cited art with amended independent claim 7. The rejections under §102(b) should be withdrawn. Notification to that effect is requested.

Independent claim 13 relates to a pivot mount system for pivotally mounting a booster arm assembly to a vehicle frame. The pivot mount system according to independent claim 13 requires a U-shaped portion having a base and a pair of spaced legs defining a pair of connection sites for connecting the U-shaped portion to a pivot bearing, and a mounting plate formed unitarily with the U-shaped portion. According to independent claim 13, the mounting plate must be attached to a frame member of the vehicle frame with the mounting plate located adjacent one side of the frame member.

The relevant disclosure of Konop is discussed above.

Konop does not show, teach or disclose each and every element of independent claim 13. First, Konop does not show, teach or disclose a U-shaped portion integrally formed with a mounting plate as required by independent claim 13. As noted above, Konop does not appear to disclose a mounting plate formed unitarily with the U-shaped portion 180. Rather, Konop appears to show U-shaped portion 180 formed integrally with an arm 120 of the booster axle assembly. Second, Konop does not show, teach or disclose a mounting plate attached to a frame member of a vehicle frame, as required by independent claim 13. The Office Action states that a mounting plate is attached to a vehicle frame. The torque tube 130 of Konop is a component of the booster axle assembly (or swing-frame assembly), and not a vehicle frame or chassis member as stated in the Office Action. Thus, Konop does not show, teach or disclose each and every limitation of independent claim 13, and the rejection under §102(b) should be withdrawn. Notification to that effect is requested.

New claim 16 depends from independent claim 13 and includes all of the limitations of that base claim. Thus, dependent claim 16 is likewise allowable over the cited art.

Claim Rejections - 35 U.S.C. §103(a)

Claims 3 and 9 were rejected under 35 U.S.C. §103(a) as being obvious over Konop (U.S. Pat. No. 6,478,317) in view of Hulstein et al. (U.S. Pat. No. 6,135,469).

The relevant disclosure of Konop is discussed above.

Hulstein et al. discloses a frame bracket 20 with a plurality of openings for securing the plate 20 to a vehicle frame member 12 with bolts 26. (Hulstein et al., col. 3, ll. 17-22; FIGS. 2 and 4). The frame bracket 20 and a separate frame bracket 22 together define a region where an arm 32 of a booster axle assembly (or tag axle assembly) is pivotally connected. (Hulstein et al., col. 3, ll. 27-30; FIGS. 2 and 4).

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in

the art, to modify the reference. *In re Kotzab*, 217 F.3d 1365 (Fed. Cir. 2000); MPEP 2143.01. Moreover, if a proposed modification of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the cited references are not sufficient to render a claim *prima facie* obvious. *In re Ratti*, 270 F.2d 810 (CCPA 1959).

Claim 3 depends from independent claim 1 and includes all of the limitations of that base claim, and claim 9 depends from amended independent claim 7 and includes all of the limitations of that base claim. For the reasons discussed above with respect to the rejections of independent claim 1 and 7, Konop fails to disclose or suggest each and every limitation of dependent claim 3 and 9. For example, Konop fails to disclose a U-shaped member that can receive an arm of a booster axle assembly as required by independent claims 1 and 7. Moreover, there is no suggestion found in the art to modify Konop to make the U-shaped portions 180 of the arms 120 of the booster axle assembly detachable. Konop only suggests that the pivot joint wear parts of the bearings be replaceable. (Konop, col. 2, ll. 44-56). Thus, the cited references fail to disclose or suggest each and every limitation of dependent claim 3 and 9, and the rejections under §103(a) should be withdrawn. Notification to that effect is requested.

CONCLUSION

In view of the foregoing, all of the pending claims are in condition for allowance over the prior art of record. If it would in any way facilitate allowance of the present application, the Examiner is invited to contact the undersigned at the number provided below. The Commissioner is authorized to charge any additional fees associated with this paper or credit any overpayment to Deposit Account No. 11-0982.

First Named Inventor: Thomas E. Eull

Application No.: 10/800,979

-15-



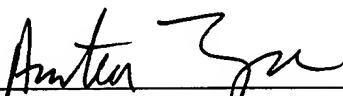
The Commissioner is authorized to charge any additional fees associated with this paper or credit any overpayment to Deposit Account No. 11-0982.

Respectfully submitted,

KINNEY & LANGE, P.A.

Date: 10.5.2006

By: _____


Austen Zuege, Reg. No. 57,907
THE KINNEY & LANGE BUILDING
312 South Third Street
Minneapolis, MN 55415-1002
Telephone: (612) 339-1863
Fax: (612) 339-6580

AZ:kmm